Results: 979 Pts (63.2 ± 11.6 years, 87.3% male) were studied. Baseline demographics and angiographic characteristics were similar between groups with no difference in lesion length, calcification or proximal vessel tortuosity. There was a significant difference in the rate of bifurcations performed via the TRA and TFA (29.1% vs. 14.6%, p<0.0001). Parallel wire technique and retrograde recanalisation were used more frequently from the TFA. TRA was associated with an increased use of anchoring balloons.
Sheath sizes > 6 French were used in 20/979(2%). Larger sheath size was associated with a higher rate of parallel wire technique (p=0.0004), retrograde recanalisation (p<0.0001) and tornus use (p=0.027).

Conclusions: TRA has equivalent success rates to TFA in Pts with similar lesion characteristics, requires less invasive sheath sizes and allows complex techniques such as retrograde recanalisation.

	TFA (233 patients)	TRA (646 patients)	P value
Sheath size – 6F	218 (93.6%)	642 (99.4%)	<0.0001
Sheath size – 8F	11 (4.7%)	0 (0)	<0.0001
Parallel wire	54 (23.2%)	106 (16.4%)	0.029
Side branch technique	7 (3.0%)	41 (6.3%)	0.06
Anchoring balloon	7 (3.0%)	48 (7.4%)	0.017
Retrograde recanalisation	16 (6.9%)	18 (2.8%)	0.009
Procedural time	73.4 +/–41.2min	80.7+/–40.7min	0.03
Contrast use	238.7mls +/–180.2mls	286.2 +/–157.3mls	0.001
Angiographic Success	139 (67.8%)	441 (70.7%)	0.44

071

Drug-eluting stents: do we respect the one-label use in our daily practice?

Etienne Puymirat (1), Aurès Chaib (1), Aurèlie Chaudeurge (1), Ludovic Trinquart (2), François Ledru (1), Eric Durand (1), Nicolas Danchin (1), Didier Blanchard (1)
(1) Hôpital Européen Georges Pomipdou (HEGP), Cardiologie, Paris, France – (2) Hôpital Européen Georges Pompidou, Epidemiologie et recherche clinique, Paris, France

Background: Drug–eluting stents (DES) are known to dramatically reduce restenosis. However, they are more expansive than bare-metal stents (BMS) and they require prolonged dual antiplatelet therapy. In France, the French Society of Cardiology and the "Haute autorité de Santé" have defined recommendations for the use of DES (restricted to patients in high-risk group).

Aim: The aim of this work was to evaluate our practice (whether these recommendations were well respected or not in our center). Between November 2007 and January 2008 then November 2008 and January 2009 we evaluated all Percutaneous Coronary Interventions (PCI).
Results: Two hundred and sixteen (216) patients (mean age 65 ± 13 years, 164 (76 %) were males and, 41 (19%) were diabetics) had a PCI for stable angina or silent ischemia (47%), unstable angina or acute coronary syndrome (ACS) ST- (26%), ACS ST+ < 48 hours (24%) or ACS ST+ > 48 hours-1 month (3%). Two hundred and seventy six (276) stents were used, including 35% of DES. The recommendations were well respected in 82% of cases. However, 27% of BMS were implanted in patients in whom DES were indicated.

Conclusion: The French's recommendations for DES are a reference to help practitioners, but they require to be adapted to each patient, depending on clinical state and their ability to be treated with prolonged dual antiplatelet therapy.

072

Five-year outcome of patients with bifurcation lesions treated with provisional side branch T-stenting using drug-eluting stents.

Neus Salvatella (1), Helen Routledge (1), Thierry Lefèvre [Orateur] (1), Marie-Claude Morice (1), Philippe Garot (1), Yves Louvard (1), Thierry Unterseeh (2), Oscar Tavolaro (3), Thomas Hovasse (1), Bernard Chevalier (1)
(1) Institut Hospitalier Jacques Cartier, Institut Cardiovasculaire Paris Sud, Massy, France – (2) Hôpital Privé Claude Galien, Institut Cardiovasculaire Paris Sud, Quincy, France – (3) Hôpital Privé Claude Galien, Quincy, France

Background: Coronary bifurcation lesions remain a challenge, as lower success rates and higher reintervention rates persist in this lesion subset. The ideal strategy to treat such lesions is still debated and data regarding long-term efficacy and safety of drug-eluting stents in this setting are sparse.
Objectives: We sought to determine the long-term efficacy and safety of a provisional side branch T-stenting (PTS) strategy for bifurcation lesions in an unselected population.

Methods: 477 consecutive Pts were treated for bifurcation lesions with DES (Paclitaxel or Sirolimus-eluting stents) between 2003 and 2005. Data were entered prospectively into a single-center registry. The PTS strategy was employed in 92%, with a side-branch stent in 28% and final kissing balloon inflation in 95%. Five-year follow-up, at a median of 61 months, is available for 93.5 % of patients.

Results: Angiographic success was achieved in 99%, with 2.5 % in-hospital major adverse cardiac events (MACE, defined as any cardiac death, early reintervention, Q – or non-Q-wave MI or target vessel revascularisation). The cumulative rate of MACE was 10.7 % at 1 year, 13.6% at 2 years and 19.7% at 5 years, including target vessel revascularisation rates of 6.9%, 8.9% and 13%, and cardiac death rates of 3%, 3.7% and 6.7%, respectively. Ischaemia-driven target lesion revascularisation at 5 years is 7.3%. The cumulative rate of definite or probable stent thrombosis at long-term is 3.1%, most cases occurring within the first year (2.5%). The need for reintervention in the long-term was not predicted by any procedural variable, and not significantly related to the use of 1 or 2 stents or to the type of stent deployed.

Conclusions: A PTS strategy with first generation drug-eluting stents, was applicable to over 90% of real-world patients with bifurcation lesions with a target lesion revascularisation < 10% at 5 years. The rate of very-late stent thrombosis in this complex lesion subset remains low.

073

Does clinical profile predict double non-responsiveness to aspirin and clopidogrel?

Anouska Moynagh (1), Pankaj Jariwala (1), Thomas Hovasse (1), Marie-Claude Morice (1), Yves Louvard (1), Thierry Unterseeh (2), Hakim Benamer (1), Bernard Chevalier (1), Philippe Garot (1), Thierry Lefèvre (1)
(1) Institut Hospitalier Jacques Cartier, Institut Cardiovasculaire Paris Sud, Massy, France – (2) Hôpital Privé Claude Galien, Institut Cardiovasculaire Paris Sud, Quincy, France

Purpose: Antiplatelet drugs, including aspirin and clopidogrel have proven efficacy in atherothrombotic event prevention. However, variability of platelet response measured in the laboratory has been reported and is a subject of keen interest.

Methods: 500 consecutive Pts treated with PCI between Nov 2007 and Dec 2009 and who had VASP and PFA tests performed were retrospectively identified from a dedicated database. All Pts were pretreated with a loading dose of 600mg clopidogrel and had a daily maintenance dose of 75mg, or 150mg if their weight was > 80kg. All Pts were under regular aspirin (160mg/day). Using VASP >50% and PFA<170 to define aspirin and clopidogrel resistance, we compared Pts who were double non-responders with double responders.

Results: 246 (49.2%) patients were responders to both aspirin and clopidogrel, while 58 (11.6%) were double non-responders. Multivariate analysis confirmed statistical significance between hypertensive Pts and double

▶

responders (p=0.03) and a higher rate of males (p=0.06) as well as pts with previous myocardial infarction (p=0.06) in this group. There were no statistically significant differences in sex, BMI or diabetics.
Additional analysis of response versus weight showed an association with Pts weighing less than 75kg who were more likely to be double responders (p=0.02)

Variable	Double responders	Double non-responders	P
Male	191 (77.6%)	50 (86.2%)	0.15
Age(yrs)	67.3 +/-10.6	63.8+/-11.5	0.06
Weight (kg)	77.7+/-15.3	79.2+/-14.6	0.48
BMI	25.4+/-7.2	27.2+/-5.4	0.04
Smoking	89 (36.2%)	20 (35.5%)	0.81
Dyslipidaemia	152 (61.8%)	35 (61.4%)	0.96
Diabetes	52 (4.7%)	17 (6.1%)	0.22
Hypertension	159 (64.6%)	29 (50.1%)	0.06
Family history	18 (7.3%)	2 (3.5%)	0.20
Past PCI	88 (35.8%)	19 (33.3%)	0.73
Past CABG	9 (3.7%)	2 (3.5%)	0.96
Past MI	25 (10.1%)	11 (19.2%)	0.11
Weight <75kg	116 (46.8%)	18 (31.0%)	0.02

Conclusion: Combined aspirin and clopidogrel non-responsiveness is found in almost 12% of Pts. The only clinical predictor is weight>75kg.

074

Risk factors for procedural failure of percutaneous coronary intervention for chronic total occlusion. Impact of novel guide wire "Fielder XT"

Kentaro Hayashida (1), Yves Louvard (1), Aleem Khand (1), Sanjay Sastry (1), Philippe Garot (1), Thomas Hovasse (1), Thierry Unterseeh (2), Marie-Claude Morice (1), Thierry Lefèvre (1)
(1) Institut Hospitalier Jacques Cartier, Institut Cardiovasculaire Paris Sud, Massy, France – (2) Hôpital Privé Claude Galien, Institut Cardiovasculaire Paris Sud, Quincy, France

Purpose: Chronic total occlusion (CTO) remains one of the last frontiers of percutaneous coronary intervention (PCI). Recently, a novel "soft" guidewire (GW) developed for tracking invisible micro-channels (Fielder XT) became available in France. The purpose of this study was to clarify the risk factors contributing to PCI success for CTO lesions and evaluate the efficacy and safety of this GW.

Methods: The study included 166 consecutive Pts with CTO's (European CTO Club definition) who underwent primary PCI at our institution between June 2008 and Feb 2010 by 2 experienced operators. The cohort was divided into 2 groups: group 1 (n=83), treated before availability of "Fielder XT" GW in France and group 2 (n=83), treated since availability.

Results: Clinical and angiographic characteristics were similar in both groups (age 63.9±11.3years, lesion length 23.0±18.1mm, bridging collateral 37.%, tortuosity score 0.16±0.37/1 and calcification score 0.94±1.08/3). Fielder XT was used in 1 case (1.2%) in group 1 and 67 (80.7%) in group 2. Micro catheters were used more frequently in group 2 (73.2% vs 56.6%; p=0.013) and parallel wire technique was less required (16.2% vs 31.3%; p=0.011). Angiographic success rate was significantly higher in group 2 (84.3% vs 67.5%; p=0.005) with a lower rate of dissection (12.2% vs 24.7%; p=0.02) and a trend for a lower rate of perforation (4.9% vs 1.2%; p=ns). Predictors of failure in the total cohort were by multivariate logistic regression analysis: proximal tortuosity (p=0.048, OR=3.15), absence of bifurcation (p=0.024, OR=3.39), no visible stump (p<0.0001, OR=6.25), calcification (p=0.029, OR=1.56) and patient in group 1 (p=0.015, OR=3.37).

Conclusion: Introduction of a dedicated "soft" wire in the CTO treatment strategy improves the angiographic success rate of PCI with a more simple and "soft" technique. Multivariate analysis confirmed classical independent predictors of failure but also demonstrated that a new device may influence success rate.

075

Identification of patients at risk for premature discontinuation of oral antiplatelet therapy after elective percutaneous coronary intervention

Guillaume Cayla (1), Jean Philippe Collet (2), Johanne Silvain (2), Laurent Schmutz (1), Bertrand Ledermann (1), Jean-Christophe Macia (3), Richard Gervasoni (3), Luc Cornillet (3), Florence Leclercq (3), Patrick Messner-Pellenc (1)
(1) CHU Nîmes, Hopital Caremeau, Service de Cardiologie, Nîmes, France – (2) CHU Pitié Salpêtrière, Institut de cardiologie, INSERM U 937, Paris, France – (3) Hopital Arnaud de Villeneuve, Cardiologie, Montpellier, France

Background: Premature discontinuation of antiplatelet therapy is a major risk factor of stent thrombosis after drug-eluting stent placement leading to an increased risk of death.

Objectives: We sought to determine by a simple questionnaire the prevalence of patients at risk for premature discontinuation of oral antiplatelet therapy in elective percutaneous coronary intervention (PCI).

Methods: Patients scheduled for elective PCI underwent a routine interview (RI) and a specific questionnaire (SQ) by two independent physicians the day before the intervention. The SQ was designed to identify bleeding disorders, suspected cancer, planned invasive procedures and self evaluation of compliance. The final decision of drug eluting stent (DES) implantation was made by a third independent physician who performed the planned PCI and who had full access to the patient record.

Results: At least one contraindication to DES implantation was found in one third of the study population (82/302, 27%) after the RI. All these patients were also identified by the SQ. At total of 31 additional patients were identified by the SQ as non eligible for DES implantation. Active bleeding (n=14) and scheduled biopsies (n=4) were the two main contraindications to DES implantation isolated by the SQ. Patients characteristics and angiographic findings identified 59.9% patients (n=181/302) eligible for a DES implantation. Finally the physician performing the PCI excluded 66.3% of the patients (n=79/302) who could receive a DES and implanted a bare metal stent (BMS) instead. This decision was based on the findings of the dedicated questionnaire on top of the interview in 30 patients (38%) and in 49 patients (62%) for other reasons.

Conclusions: In elective PCI, a simple questionnaire used before DES implantation can improve identification of patients at high risk for premature discontinuation of antiplatelet therapy.

076

In hospital short and long term prognostic value of homocysteine in patients with ST elevation myocardial infarction

Fathia Mghaieth (1), Ramy Trabelsi (1), Sami Mourali (2), Abdeljelil Farhati (2), Salem Abdessalem (2), Kéchida Zohra (1), Rafik Boussaada (2), Rachid Mechmèche (2)
(1) Hôpital la Rabta,Cardiologie, Tunis, Tunisie – (2) Hôpital la Rabta, Tunis, Tunisie

Background: Homocysteine has pro-thrombotic and pro-inflammatory properties, it is a risk factor for cardiovascular disease. The prognostic value of homocysteine in ST elevation myocardial infarction (STEMI) remains uncertain. Aim: This study evaluates the predictive role of homocysteine level on short and long term outcome in patients with STEMI.

Methods and results: In this prospective cohort study, 186 consecutive patients (mean age 58.4±12.6 years, 162 males, 65 diabetics) with STEMI were enrolled. Plasma total homocysteine levels were measured within 24h after admission. Inhospital complications: death, shock, left ventricular insuf-

▶